# GLB1L2 (C-14): sc-138305



The Power to Question

#### **BACKGROUND**

GLB1L2 ( $\beta$ -galactosidase-1-like protein 2) is a 636 amino acid secreted protein belonging to the glycosyl hydrolase 35 family. The gene encoding GLB1L2 maps to human chromosome 11q25. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11.

# **REFERENCES**

- 1. Grossfeld, P.D., et al. 2004. The 11q terminal deletion disorder: a prospective study of 110 cases. Am. J. Med. Genet. A 129: 51-61.
- Loussouarn, G., et al. 2006. KCNQ1 K+ channel-mediated cardiac channelopathies. Methods Mol. Biol. 337: 167-183.
- Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. Nature 440: 497-500.
- Zehelein, J., et al. 2006. Skipping of exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. J. Biol. Chem. 281: 35397-35403.
- 5. Ataga, K.I., et al. 2007. β-thalassaemia and sickle cell anaemia as paradigms of hypercoagulability. Br. J. Haematol. 139: 3-13.
- Berger, A.C., et al. 2007. The subcellular localization of the Niemann-Pick type C proteins depends on the adaptor complex AP-3. J. Cell Sci. 120: 3640-3652.
- Lee, J.H., et al. 2007. Activation and regulation of ATM kinase activity in response to DNA double-strand breaks. Oncogene 26: 7741-7748.
- O'Connor, M.J., et al. 2007. Targeted cancer therapies based on the inhibition of DNA strand break repair. Oncogene 26: 7816-7824.
- Kaste, S.C., et al. 2008. Wilms' tumour: prognostic factors, staging, therapy and late effects. Pediatr. Radiol. 38: 2-17.

# CHROMOSOMAL LOCATION

Genetic locus: GLB1L2 (human) mapping to 11q25.

#### **SOURCE**

GLB1L2 (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of GLB1L2 of human origin.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

#### **PRODUCT**

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138305 P, ( $100 \mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

GLB1L2 (C-14) is recommended for detection of GLB1L2 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with GLB1L or GLB1L3.

GLB1L2 (C-14) is also recommended for detection of GLB1L2 in additional species, including canine.

Suitable for use as control antibody for GLB1L2 siRNA (h): sc-96520, GLB1L2 shRNA Plasmid (h): sc-96520-SH and GLB1L2 shRNA (h) Lentiviral Particles: sc-96520-V.

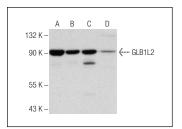
Molecular Weight of GLB1L2: 72 kDa.

Positive Controls: WFDC8 (h): 293T Lysate: sc-372273.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **DATA**



GLB1L2 (C-14): sc-138305. Western blot analysis of GLB1L2 expression in DU 145 (A), PC-3 (B) and A549 (C) whole cell Ivsates and human kidney tissue extract (D).

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.